

WHAT IS CLAIMED IS:

1. An interface card for interfacing a drive to a LAN without modifying a main control card of the drive, the interface card comprising:

a dual port memory interface to the main control card of the drive for receiving feedbacks

5 and transmitting setpoints;

an ASIC for generating an interrupt signal;

an interrupt line that transmits the interrupt signal and informs a communication processor connected on the main control card to update the feedbacks in the dual port memory and read the setpoints from the dual port memory; and

10 control registers for interfacing the communication processor to the LAN.

2. The interface card of claim 1, wherein the ASIC is an ASIC II controller for interfacing with firmware in the communication processor in order to pass data between the main processor and the interface card.

3. The interface card of claim 1, further comprising a stab terminal for a ground
15 connection.

4. The interface card of claim 1, further comprising a LNPL connector for connecting the interface card with the main control card of the drive.

5. The interface card of claim 1, further comprising a 2PL connector for transmitting power to the interface card.

20 6. The interface card of claim 1, wherein the drive is an AC/DC2000 drive.

7. The interface card of claim 1, wherein the LAN is an ISBus LAN.

8. An interface card for interfacing a drive to a LAN, the interface card comprising:

a dual port random access memory having control registers;
an ASIC connected with the dual port random access memory;
bus driving components for connecting the ASIC with the LAN;
an interrupt line for transmitting communication between a communication processor on
5 a main control card of the drive, the ASIC, and the dual port random access memory.

9. The interface card of claim 8, wherein the ASIC is an ASIC II controller for
interfacing with firmware in the communication processor in order to pass data between the main
processor and the interface card.

10. The interface card of claim 8, further comprising a stab terminal for a ground
10 connection.

11. The interface card of claim 8, further comprising a LNPL connector for
connecting the interface card with the main control card of the drive.

12. The interface card of claim 8, further comprising a 2PL connector for transmitting
power to the interface card.

13. The interface card of claim 8, wherein the drive is an AC/DC2000 drive.
15

14. The interface card of claim 8, wherein the LAN is an ISBus LAN.

15. A method for interfacing a drive to a LAN without modifying a main control card
of the drive, the main control card including a communications processor and a main processor,
the method comprising the steps of:

20 triggering an interrupt to notify the communications processor on the main control card to
update the feedbacks in the dual port memory and read the setpoints from the dual port memory;

transmitting setpoints from the dual port memory interface to the main processor on the main control card;

transmitting feedback from the main processor on the main control card to the dual port memory interface; and

5 interfacing the communications processor with the LAN with control registers.

16. The method of claim 15, further comprising the step of performing a page swap in the dual port memory after updating the feedbacks in the dual port memory.

17. The method of claim 16, further comprising the step of storing the transmitted set points in a communication processor external RAM inactive page.

10 18. The method of claim 17, further comprising the step of performing an external RAM page swap.

19. A method for interfacing a drive to a LAN, the drive having a main control card including a communication processor and a main processor, the method comprising the steps of:

15 providing an interface card having an ASIC, a dual port memory and an interrupt line for transmitting an interrupt signal generated by the ASIC over the interrupt line to the communications processor;

updating feedbacks in an inactive page of the dual port memory;

swapping the inactive page with an active page;

reading setpoints from the inactive page after swapping;

20 loading setpoints into an external RAM of the communication processor;

performing a page swap on the external RAM of the communication processor; and

transmitting setpoints from the active page of the communication processor external
RAM to the main processor.